



Docket No.: 20731 US (C38435/120940)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Akira ASAKURA et al.

Serial No.: 09/938,035

Filed: August 23, 2001

For: MICROBIAL PROCESS FOR

> PRODUCING L-ASCORBIC ACID. D-**ERYTHORBIC ACID, AND SALTS**

THEREOF

Examiner: Not Yet Assigned

RECEIVED

AUG 2 0 2002

TECH CENTER 1600/2900

New York, NY August 12, 2002

RESPONSE TO NOTICE TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE DISCLOSURES

Commissioner for Patents U.S. Patent and Trademark Office **BOX SEQUENCE** P.O. Box 2327 Arlington, VA 22202

Sir:

This is in response to the NOTICE TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE DISCLOSURES ("Notice") mailed June 11, 2002, which set a two-month shortened statutory period to respond. The due date for reply to the Notice is August 12, 2002 because August 11, 2002 fell on a Sunday. 35 U.S.C. § 21(b); 37 C.F.R. § 1.7 and 1.8. Accordingly, this response is filed timely upon mailing with an executed Certificate of Mailing on or before August 12, 2002. (37 C.F.R. § 1.8). It is not believed that this response occasions any fee, but should there be any fee, please charge the same to Deposit Account No. 02-4467. A duplicate copy of this sheet is enclosed.

Please amend the application as follows:

IN THE SPECIFICATION

Please cancel the Sequence Listing on pages 41-43 of the original application and renumber the specification accordingly. Please enter the substitute Sequence Listing set forth in Exhibit A on the next page after the section entitled Abstract.

REMARKS

In the Notice, it is asserted that the content of the computer readable form ("CRF") of the Sequence Listing submitted with the response of May 7, 2002 does not comply with the requirements of 37 C.F.R. §§ 1.821 through 1.825. (See Notice at page 1). In particular, it is asserted that the use of the term "n" was detected in the Sequence Listing and that such term must be defined in the <220> and <223> sections of the Sequence Listing. (See "Raw Sequence Listing Error Summary" on page 4 of the Notice). A copy of the Notice is attached hereto as Exhibit B.

In response to the Notice, a paper copy and a CRF of a substitute Sequence Listing are attached hereto, respectively, as Exhibits A and C.

believed that this response occasions any fee, but should there be any fee, please charge the same to Deposit Account No. 02-4467. A duplicate copy of this sheet is enclosed.



Please amend the application as follows:

IN THE SPECIFICATION

Please cancel the Sequence Listing on pages 41-43 of the original application and renumber the specification accordingly. Please enter the substitute Sequence Listing set forth in Exhibit A on the next page after the section entitled Abstract.

REMARKS

In the Notice, it is asserted that the content of the computer readable form ("CRF") of the Sequence Listing submitted with the response of May 7, 2002 does not comply with the requirements of 37 C.F.R. §§ 1.821 through 1.825. (See Notice at page 1). In particular, it is asserted that the use of the term "n" was detected in the Sequence Listing and that such term must be defined in the <220> and <223> sections of the Sequence Listing. (See "Raw Sequence Listing Error Summary" on page 4 of the Notice). A copy of the Notice is attached hereto as Exhibit B.

In response to the Notice, a paper copy and a CRF of a substitute Sequence Listing are attached hereto, respectively, as Exhibits A and C.

Pursuant to 37 CFR § 1.821(f), undersigned counsel hereby represents that, upon information and belief, the content of the paper and computer readable Sequence Listings enclosed herewith are the same, and no new matter has been added.

It is believed that the Sequence Listing presented herewith places the captioned application into compliance with the requirements set forth in 37 CFR § 1.821. Entry of the Sequence Listing is respectfully solicited.

If the Examiner wishes to discuss any part of this submission, please contact the undersigned at the number indicated.

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to the Commissioner for Patents, Washington, D.C.

20231, on August 12, 2002.

Gonzalo Merino

Respectfully submitted,

Gonzalo Merino

Registration No. 51,192

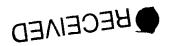
BRYAN CAVE LLP

245 Park Avenue

New York, New York 10062

(212) 692-1800

Page I of 1



AUG 2 0 2002

WATES PATENT AND TRADEMARK OFFICE

WASHINGTON, D.C. 20231 TECHUER STATES PATENT AND TRADEMARK OFFICE

FILING/RECEIPT DATE

APPLICATION NUMBER

New York, NY 10167-0034

Stephen M. Haracz, Esq.

245 Park Avenue

Bryan Cave, LLP

20731 US (C38435/120940) ATTORNEY DOCKET NUMBER

Akira Asakura FIRST NAMED APPLICANT

08/23/2001

\$50,856/60

CONFIRMATION NO. 1662

FORMALITIES LETTER

.OC00000008565424*

Date Mailed: 06/11/2002

BRY N CYNEILP

DISCLOSURES CONTAINING NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE NOTICE TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS

below to avoid abandonment. Extensions of time may be obtained under the provisions of 37 CFR 1.136(a). Applicant is given TWO MONTHS FROM THE DATE OF THIS NOTICE within which to file the items indicated

1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825(d). or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR of the sequence listing information recorded in computer readable form is identical to the written (on paper substitute computer readable form (CRF) copy of the "Sequence Listing" and a statement that the content indicated on the attached copy of the marked -up "Raw Sequence Listing." Applicant must provide a the computer readable form does not comply with the requirements of 37 C.F.R. 1.822 and/or 1.823, as • A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of

For questions regarding compliance to these requirements, please contact:

- For Rules Interpretation, call (703) 308-4216
- To Purchase Patentin Software, call (703) 306-2600
- patin21help@uspto.gov or patin3help@uspto.gov ■ For Patentin Software Program Help, call (703) 306-4119 or e-mail at

A copy of this notice MUST be returned with the reply.

Initial Patent Examination Division (703) 308-1202 Customer Service Center

PART I - ATTORNEY/APPLICANT COPY

AUG 2 0 2002

SYSTEMS BRANCH

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number:

Source:

Date Processed by STIC:

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS. PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216. PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax) PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.1 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

http://www.uspto.gov/web/offices/pac/checker

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail. Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom. Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

- 1. EFS-Bio (http://www.uspto.gov/ebc/efs/downloads/documents.htm, EFS Submission User Manual - ePAVE)
- 2. U.S. Postal Service: U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
- 3. Hand Carry directly to:
 - U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
 - U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
- 4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 01/29/2002



AUG 2 0 2002



Does Not Comply
Raw Sequence Listing Error Sum Corrected Diskette Needed ENTER 1600/2900

ERROR DETECTED	SUGGESTED CORRECTION SERIAL NUMBER: 09/938, 035A
ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE	
1Wrapped Nucleics Wrapped Aminos	The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
2Invalid Line Length	The rules require that a line not exceed 72 characters in length. This includes white spaces.
3Misaligned Amino Numbering	The numbering under each 5 th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
4Non-ASCII	The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
5Variable Length	Sequence(s) contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
6Patentin 2.0 "bug"	A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
7Skipped Sequences (OLD RULES)	Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence: (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading) (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) This sequence is intentionally skipped
	Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
8Skipped Sequences (NEW RULES)	Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence. <210> sequence id number <400> sequence id number 000
9Use of n's or Xaa's (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing. Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present. In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
10Invalid <213> Response	Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
11Use of <220>	Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
PatentIn 2.0 "bug"	Please do not use "Copy to Disk" function of Patentin version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.

AMC - Biotechnology Systems Branch - 06/04/2001



JECH CENTER 1600 Does Not Comply Corrected Diskette Needed



OIPE

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/938,035A

DATE: 05/23/2002 TIME: 18:06:05

see iten # 9

/ on E-RROK SUMMARY

SHEET

Input Set : A:\seq list-20731,RocheVit.txt Output Set: N:\CRF3\05232002\1938035A.raw

3 <110> APPLICANT: Roche Vitamins AG

5 <120> TITLE OF INVENTION: Microbial process for producing L-ascorbic acid and

D-erythorbic acid

8 <130> FILE REFERENCE: Alicyclobacillus NA20, 21, FJ21 16S nuc

C--> 10 <140> CURRENT APPLICATION NUMBER: US/09/938,035A

C--> 11 <141> CURRENT FILING DATE: 2001-08-23

13 <150> PRIOR APPLICATION NUMBER: EP Application No. 00118059.5

14 <151> PRIOR FILING DATE: 2000-08-23

16 <160> NUMBER OF SEQ ID NOS: 3

18 <170> SOFTWARE: PatentIn Ver. 2.1

ERRORED SEQUENCES

98 <210> SEQ ID NO: 3

99 <211> LENGTH: 1495

100 <212> TYPE: DNA

101 <213> ORGANISM: Alicyclobacillus sp.

103 <220> FEATURE:

104 <221> NAME/KEY: rRNA

105 <222> LOCATION: (1)..(1495)

106 <223> OTHER INFORMATION: FJ-21 Partial 16SrRMA gene seguence

108 <400> SEQUENCE: 3

109 aggacgaacg ctggcggcgt gcctaataca tgcaagtcga gcggaccyct tctgaggtca 60

110 gcggcggacg ggtgaggaac acgtgggtaa tctgcctt/c agaccg/gaat aacgcccgga 120

111 aacgggcgct aatgccggat acgcccgcga ggaggcatct tctt/cgggg aaaggcccga 180

W--> 112 ttgggccgct gagagaggag cccgcggcgc attagctngt tggcggggta acggcccacc 240

113 aaggcgacga tgcgtagccg acctgagagg gtgaccggcc acactgggac tgagacacgg 300

114 cccagactcc tacgggaggc agcagtaggg aatcttccgc /aatgggcgca agcctgacgg 360

115 agcaacgccg cgtgagcgaa gaaggccttc gggttgtaax gctctgttgc tcggggagag 420

116 cggcatgggg agtggaaagc cccatgcgag acggtacgga gtgaggaagc cccggctaac 480

117 tacgtgccag cagccgcggt aaaacgtagg gggcga/cgt tgtccggaat cactgggcgt 540

118 aaagggtgcg taggcggtcg agcaagtctg gagtgaaagt ccatggctca accatgggat 600

119 ggctctggaa actgcttgac ttgagtgctg gagdggcaag gggaattcca cgtgtagcgg 660

120 tgaaatgcgt agagatgtgg aggaatacca gyggcgaagg cgccttgctg gacagtgact 720

121 gacgetgagg cacgaaageg tggggageaa acaggattag ataccetggt agtecacgee 780

122 gtaaacgatg agtgctaggt gttggggggg cacaccccag tgccgaagga aacccaataa 840

123 gcactccgcc tggggagtac ggtcgcagga ctgaaactca aaggaattga cgggggcccg 900

124 cacaagcagt ggagcatgtg gtttaattcg aagcaacgcg aagaacctta ccagggcttg 960

125 acatecetet gaegggtgea gagat/geace tteeettegg ggeagaggag acaggtggtg 1020

126 catggttgtc gtcagctcgt gtcgtgagat gttgggttca gtcccgcaac gagcgcaacc 1080

W--> 127 cttgacctgt gttaccagcg contanggcg gggactcaca ggtgactgcc ggcgtaagtc 1140

128 ggaggaagge ggggatgaeg teaaateate atgeecetga tgteetggge tacacacgtg 1200

RAW SEQUENCE LISTING

DATE: 05/23/2002

PATENT APPLICATION: US/09/938,035A

TIME: 18:06:05

Input Set : A:\seq list-20731, RocheVit.txt Output Set: N:\CRF3\05232002\I938035A.raw

129 ctacaatggg cggtacaaag ggaggcgaag ccgcgaggcg gagcgaaacc caaaaagccg 1260

130 ctcgtagttc ggattgcagg ctgcaactcg cctgcatgaa gccggaattg ctagtaatcg 1320

131 cggatcagca tgccgcggtg aatacgttcc cgggccttgt acacaccgcc cgtcacacca 1380

132 cgagagtcgg caacacccga agtcggtgag gtaaccccga aaggggagcc agccgccgaa 1440

133 ggtggggtcg atgattgggg tgaagtcgta acaaggtagc cgtaccggaa ggtgc

E--> 136 Î E--> 13/9 1

remove extra material at end of file

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/938,035A

DATE: 05/23/2002 TIME: 18:06:06

Input Set : A:\seq list-20731,RocheVit.txt
Output Set: N:\CRF3\05232002\1938035A.raw

L:10 M:270 C: Current Application Number differs, Replaced Application Number L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date L:34 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:180 L:47 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:960 L:54 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:1380 L:73 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:180 L:112 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:180 L:127 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:1080 L:136 M:254 E: No. of Bases conflict, this line has no nucleotides. M:254 Repeated in SeqNo=3